



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>C08L 7/02, C08J 5/18, C05F 17/02</b>		A1	(11) International Publication Number: <b>WO 99/48969</b> (43) International Publication Date: 30 September 1999 (30.09.99)
(21) International Application Number: <b>PCT/EP99/02053</b> (22) International Filing Date: 18 March 1999 (18.03.99)		(74) Agent: NEEL, Henry; ELF Atochem S.A., Dept. Propriété Industrielle, Cours Michelet – La Défense 10, F-92091 Paris La Défense Cedex (FR).	
(30) Priority Data: 10-078743 26 March 1998 (26.03.98) JP		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(71) Applicant ( <i>for all designated States except US</i> ): ELF ATOCHEM S.A. [FR/FR]; 4/8, cours Michelet, F-92080 Puteaux (FR). (72) Inventors; and (75) Inventors/Applicants ( <i>for US only</i> ): ISHINO, Kiyotaka [JP/JP]; Elf Atochem Japan Kyoto Technical Center, Science Center Building 3, Kyoto Research Park, 1 Chudoji Awato-cho, Shimogyo-ku, Kyoto-shi, Kyoto-fu, Kyoto 600 (JP). KURATSUJI, Takatoshi [JP/JP]; Elf Atochem Japan Kyoto Technical Center, Science Center Building 3, Kyoto Research Park, 1 Chudoji Awato-cho, Shimogyo-ku, Kyoto-shi, Kyoto-fu, Kyoto 600 (JP). IKETAKI, Takashi [JP/JP]; Nishi 2-7, Inada-cho, Obihiro-shi, Hokkaido (JP).		Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	
(54) Title: <b>FILM FOR ACCELERATED COMPOST FERMENTATION</b>			
(57) Abstract			
<p>Objective: the objective of the present invention lies in shortening the compost preparation period by a simple method and preventing contamination of underground water. Constitution: film for accelerated compost fermentation which is characterized in that it comprises a composition in which the chief component is polymer containing polyether chains as structural units, and where the water vapour permeability thereof is at least 300 g/m<sup>2</sup>.24h, the oxygen permeability is at least 1,000 cm<sup>3</sup>/m<sup>2</sup>.24h.atm and the carbon dioxide permeability is at least 10,000 cm<sup>3</sup>/m<sup>2</sup>.24h.atm; together with film for accelerated compost fermentation which is characterized in that the aforesaid film is reinforced by means of a nonwoven material or net.</p>			

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>AM7073-HN/fo</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/EP 99/02053</b>	International filing date (day/month/year) <b>18/03/1999</b>	(Earliest) Priority Date (day/month/year) <b>26/03/1998</b>
Applicant <b>ELF ATOCHEM S.A.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  Certain claims were found unsearchable (See Box I).

3.  Unity of Invention is lacking (see Box II).

4. With regard to the title,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 99/02053

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 6 C08L71/02 C08J5/18 C05F17/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 C08L C08J C08G C05F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 660 887 A (NUSSBAUMER WALTER ET AL) 26 August 1997 (1997-08-26) claim 1 column 3, line 32 ---	1-3
X	KAPLAN W A ET AL: "THE EFFECT OF POLYMER STRUCTURE ON THE GAS PERMEABILITY OF MODEL POLYURETHANES" JOURNAL OF CELLULAR PLASTICS, vol. 30, no. 3, 1 May 1994 (1994-05-01), pages 242-272, XP000443643 ISSN: 0021-955X tables 2A,B ---	1,2
X	EP 0 378 015 A (ATOCHIM ELF SA) 18 July 1990 (1990-07-18) claim 1 ---	1,2 -/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## ° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

22 July 1999

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12.08.1999

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International Application No  
PCT/EP 99/02053

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 44 40 837 A (BASF AG) 23 May 1996 (1996-05-23) claim 1 page 8, line 65 - line 66 -----	1,2
A	US 3 895 916 A (ROSNER KURT) 22 July 1975 (1975-07-22) figures 1-4 -----	1-3

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